ASCE – INDOT STRUCTURAL COMMITTEE MEETING NO. 72 MINUTES

March 17, 2015 9:00 am, INDOT Room N642

The meeting was called to order at 9:030 a.m. by Mike McCool. Those in attendance were:

Anne Rearick INDOT, Bridge Division
Donald Shaw INDOT, Bridge Division
Stephanie Wagner INDOT, Bridge Division
Elizabeth Phillips INDOT, Bridge Division
Naveed Burki INDOT, Bridge Division
Mike Wenning GAI Consultants, Inc.
Mike McCool Beam Longest & Neff, LLC.

Seth Schickel HNTB Corp.

Kurt Heidenreich Engineering Resources, Inc.

Mike Halterman USI Consultants, Inc.

Pete White CHA, Inc.

Michael Eichenauer
Ben Borcherding
Jason Yeager
Matt Shergalis

Butler, Fairman and Seufert, Inc.
American Structurepoint, Inc.
Weddle Brothers Highway Group
National Steel Bridge Alliance

In addition to the attendees, these minutes will be sent to the following:

Greg Pankow INDOT, Construction Management

Burleigh Law HNTB Corp.

Tony Zander INDOT, Highway Management Division Jim Reilman INDOT, Construction Management

Mahmoud Hailat INDOT, Bridge Division

Keith Hoernschmeyer Federal Highway Administration

Jeremy Hunter INDOT, Bridge Division

Troy Jessup CHA, Inc.

- 1. Review and approve Meeting 71 minutes.
 - Meeting 71 minutes were approved.
- 2. Asymmetrical Barriers (White, Wenning, Law, Jessup)
 - Mr. White working on calculations.
 - FHWA pooled fund website has some useful information.
- 3. Continuity of Prestress Concrete Beams (<u>Heidenreich</u>, McCool, Hailat, Hunter, Phillips)
 - Move to parking lot
 - Look for TRB research opportunities
- 4. NEXT Beams (McCool, Heidenreich, Borcherding, Jessop
 - Looking for opportunities to try one.
- 5. Expansion Joints Options (<u>Hunter</u>, White, Wagner, Eichenauer)
 - NCHRP study due out July 2016 on joint rehabilitation

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- XJS joints lasting about 2 years
- Compressed foam (M-Seal) has good reports from other states
- All joints last 5-10 years maximum
- INDOT experimenting with replacing top 3" of terminal joint asphalt with polymer modified asphalt.
- McCool and White to develop unique special provision for compressed foam seal.
- 6. Deck Pan Details (McCool, Heidenreich, Borcherding)
 - Trimming angle doesn't work structurally.
 - Designers need to repeat IDM detail in their plans.
 - Camber is not known until concrete beams are set complicating SIP connection details.
 - Limit angle height to no more than the deck pan depth.
- 7. General Notes Sheet (McCool, Schickel, Phillips, Wenning)
 - Tabled
- 8. Hydro-demolition (<u>Wagner</u>, Wenning, Heidenreich, Yeager)
 - No current option for treating water on site.
- 9. Life-Cycle Cost (Hunter)
 - Develop parameters for use within Indiana.
 - Tabled
- 10. Concrete Patching (Wagner, Nelson, Eichenauer, Hailat, Schickel)
 - Table
- 11. Link Slab Design (Hunter, McCool, Wenning, Schickel)
 - Coordination with NYDOT
- 12. Approach Slabs (Hailat, Law, Heidenreich)
 - A poll of DOT's was taken. Responses: 8 uniform length / 5 trapezoidal.
 - Illinois DOT uses uniform length. Still has cracks but recently increased reinforcement.
- 13. High Early Strength Concrete (<u>Hailat</u>, Nelson, White)
 - Tabled

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- 14. Research Needs and Innovative Ideas (Rearick)
 - Ms. Rearick asked for ideas for future research
 - SBrite Center activities and training
 - Epoxy injection
 - NDT for bridges
 - Load rating methods for bridges designed under previous codes.
 - Carbon fiber wrap for strengthening
 - Strength loss due to pack rust.
- 15. Fiber Wrap (<u>Jessop</u>, Eichenauer, Wenning)
 - Tabled

16. New Business

- Pile Design for 3-sided Structures (<u>Hunter</u>, Schickel, White, Borcherding) Determine design assumptions for distribution of loads.
- Anchoring or Embedment of Prestress Beam Stirrups (<u>Law</u>, Hunter, Jessup, Wenning, Hailat) Investigate bars extending into the fillet, Does roughened surface provide enough friction by design.
- Unique Special Provisions On web. Committee members to review and provide comments on notes to designer. Cite web address.
- Aspire Magazine interested in an article on the committee and the joint work with INDOT and the private engineering community.
- 600k Collision Load (<u>Hunter</u>, White) Investigate load application.
- Microsilica Overlay USP as option to LMC. Experience of the committee is that they seem equal.
- Michael Wenning was selected as the committee vice-chair for a 3 year term.

17. Recurring Business

Software Practice Pointer Updates (McCool, Phillips) Standards Committee Updates (Phillips) Bridge Design Conference (McCool) Overlay Types (<u>Hunter</u>, White)

Parking Lot

Concrete mix designs
Long term deflections in prestressed beams
WWF in prestressed beams
Special provision for high strength concrete
Mild reinforcement in prestressed beams (particularly 401 bars)
Post Tensioning Specs
Terminal Joint Details
Alternate Structure Types

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The next meeting for the INDOT Structural Committee is scheduled for 9:00 a.m. on October 27, 2016, in room N642. Mike McCool will distribute an agenda prior to the meeting. This meeting was adjourned at 11:30 a.m.

Respectfully submitted,

Michael Wenning, P.E.

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